# Some Aspects of the Demographic Situation in Ukraine: Reproductive Health and Family Planning

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#### **Contents**

Foreword	3
Demographic Situation in Ukraine during Transition: An Overview	4
Reproductive Health and Family Planning	6
General Characteristics of Reproductive Health	6
Abortions	14
Family Planning	17
Measures to Improve Reproductive Health	18
Fertility	20
The Aging Process	25

Opinions expressed in this publication are that of the authors and do not necessarily coincide with that of the Government of Ukraine or the UN system organizations in Ukraine.

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#### Foreword

This publication is a contribution to the efforts of Ukraine to draw the attention of the international community to the serious and far-reaching demographic changes that are taking place in Ukraine. Prepared in 1999, the International Year of the Elderly Peoples, it highlights the process of declining fertility in Ukraine and the impact it has on the aging of the population and its socio-economic implications.

Since its independence in 1991, the population of Ukraine has approximately decreased by about 2 million. Reasons for this have been the decline in birth rates, growing mortality and external migration. There is the growing trend of aging of the population, with Ukraine having the largest number of pensioners, constituting 14 million out of its total population of 50 million.

Many important measures were taken by the Government with regard to the national implementation of the resolutions of the International Conference on Population and Development (ICPD), especially in the areas of family planning and reproductive health. However, appropriate training and improving services on reproductive health and family planning, sex education, and increased access to modern contraception are critical needs in this area.

A consistent and comprehensive population policy has to be formulated by the Government at various stages of development of the country. Policy in this area has a significant bearing in the strategy of overall economic reform, social protection, labour market including the gender and environmental dimensions.

For the above-mentioned reasons, the United Nations System in Ukraine as a whole, and UNFPA, UNICEF, UNESCO, UNDP, and ILO, in particular, should work together with the government of Ukraine in dealing with these relevant issues.

I am pleased to introduce this publication and I sincerely hope that it will play its due role in contributing to the policy dialogue within the country and also help portray the Ukrainian population dynamics and reality to the international community.

Pedro Pablo Villanueva UNFPA Representative and UN Resident Coordinator in Ukraine

## Demographic Situation in Ukraine during Transition: An Overview

Ukraine is one of the largest countries in Europe. It rates sixth among 40 European countries in terms of population. Ukraine gained its independence in August 1991 and is currently following a path of market reform. During this period, it has been experiencing a deep economic crisis as a result of the transition from one model of development to a totally new one as well as the economic and systemic problems inherited from the past. There has been a significant decline in production and decrease in labor productivity. Prices continue to rise and the real value of wages continues to fall. Rising unemployment further contributes to the decline in living standards. Small pensions also exacerbate poverty. In fact, the pensions do not meet basic human needs. These factors have resulted in the spread of poverty. Quantitative and qualitative indicators of nutrition continue to fall. The high percentage of household income spent on food and the reduced consumption of certain basic food groups also reveals the extremely low living standards of the majority of the population.

The socio-economic crisis that is currently engulfing Ukraine has had a number of negative social-demographic consequences. One of the most important is the deterioration of economic conditions for having and raising children, which has been caused mainly by the low level of wages and salaries. The economic basis for the reproduction of population has not been secured economically which is the reason for the decline in the birth rate and the increase in the mortality rate (Figure 1).

Fertility rates in Ukraine are less than that necessary for population replacement. The net reproduction rate in 1998 was 0.563. The current decline in fertility has been caused not only by the current economic situation, but also by more fundamental and long-lasting factors. For instance, fertility rates among rural women in Ukraine were not of a high enough level to ensure natural population increase even before the social and economic changes (from 1979).

The socio-economic crisis has led to the collapse of the health care system and undermined the economic preconditions necessary for its development. The system of public health services does not coincide with the morbidity structure of the population. Together with insufficient financing, this has resulted in a significant deterioration of public health. Poverty and the state of the healthcare system are factors hampering the formation of both the quantitative and qualitative parameters of population reproduction. The worsening of the population's health is a morbid

symptom of the nineties – years of societal transformation – and has been caused by a decline in living standards and by decay of the public health care system. Currently, there is virtually no preventive medicine, while the quality of curative medicine has also been eroded. Weakened by the crisis, the health care system cannot neutralize the negative impact numerous social-economic factors have on public health, which in turn increases the risk of illness and death.

Private and fee-for-service medical institutions have not been able to compensate for the decline of the state health care establishments because these services are too expensive for the majority of citizens. The decline in public health is reflected in increased morbidity and mortality rates. Life expectancy decreased from 70.5 years in 1990 to 66.9 years in 1995. Male life expectancy decreased from 65.4 years to 61.3 years, respectively. The situation with female life expectancy is somewhat better and declined from 74.9 years in 1990 to 72.6 in 1995. In accordance with preliminary data of 1998 that indices made up 68.5, 63.2 and 73.7, respectively.

Negative fertility and mortality trends (Figure 1) have intensified depopulation, which began in Ukrainian villages in 1979. In 1991, the number of deaths in Ukraine overall exceeded the number of births (by 39,147) for the first time. In subsequent years this trend has developed rapidly. The number of deaths exceeded the number of births by 100,325 in 1992, by 184,195 in 1993 by 243,124 in 1994, by 299,726 in 1995, by 309,506 in 1996, by 311,570 in 1997 and by 300,716 in 1998. Over eight years, the population of Ukraine fell by 1,788,309 as a result of natural decrease.

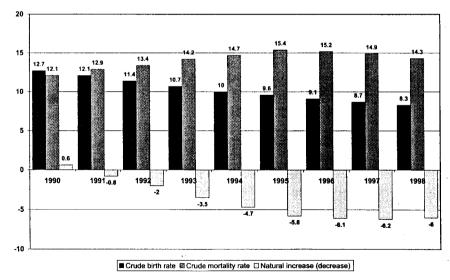


Figure 1. Crude Birth Rates, Mortality Rates and Natural Increase (Decrease) Rates in Ukraine, 1990-1998

A similar kind of situation has been recorded previously only during relatively short-term periods of world or civil wars. Depopulation is occurring continually and there is no evidence to indicate a slowdown. Alongside depopulation there has been considerable deterioration in qualitative characteristics of the population – especially health. Hence in qualifying the demographic situation in Ukraine we may refer to a demographic crisis.

With the decline of living standards in Ukraine, migration from the former Soviet republics – which increased considerably after Ukraine gained independence – decreased significantly in 1993. In 1994 the situation changed to one where there were more people emigrating from than immigrating to the country. Although the population decrease caused by the predominance of death rates over birth rates was initially compensated for by immigration, after the change in this dynamic in 1993, the absolute number of people in Ukraine began to decline. At the beginning of 1993 Ukraine's actual population was 52,244,000 whereas at the beginning of 1999 it was 50,105,600.

Thus, the population is in a situation of survival, not development. Currently, population reproduction is being disrupted. Negative demographic trends mean a prolonged unfavorable situation concerning population reproduction, which will cause a number of undesirable consequences in all spheres of societal life. Preservation of health and particularly reproductive health is of great importance in such conditions.

#### Reproductive Health and Family Planning

General characteristics of Reproductive Health

The state of the population's health is an integrated indicator of the country's general level of well being. It represents the level and character of a country's socio-economic development, and, in turn, is a powerful factor in the formation of the demographic, economic, and cultural potential of a society in the context of its sustainable development. The health of women and children is a major precondition for the development of this potential as well as the demographic-economic prospects of Ukraine. From this perspective, the reproductive health of the population is crucial.

According to the recommendations of the Program of Action of the International Conference on Population and Development (Cairo, 1994), reproductive health is understood as a condition of complete physical and social well-being – not merely the absence of diseases of reproductive system. Ukraine is still to fully meet international standards of general and reproductive health. During the transition to a market economy, the population's health – particularly that of women – has considerably worsened which is reflected in the dynamics of life expectancy that was considerably decreasing during 1990-1995. The deterioration of women's health

has been caused mainly by diseases of the circulatory system, malignant neoplasm, as well as by accidents, murders, suicides and other external incidents. The state of the population's reproductive health is extremely unsatisfactory as indicated by the maternal mortality rate. The maternal mortality rate remains high in comparison with other European countries although in recent years there has been a downward trend. In 1993-1998 the maternal mortality rate decreased by 8.5% (Figure 2). In 1998 the average index (29.5 per 100,000 born alive) varied in the regions from 5.6 to 87.4.

During the nineties, the causes of maternal mortality remained virtually unchanged. Diseases not connected to pregnancy, bleedings, hestoses and septic complications are the most common causes. Abortions and related complications take the greatest number of women's lives. Almost every fourth woman who died during pregnancy or because of related complications died because of an abortion or complications arising from it. This concerns first of all women who had an abortion performed in out-of-hospital conditions. The fact that such abortions take place is an indication of the limited access to modern family planning services and inadequate attention by men to women's reproductive and sexual health.

The infant mortality rate is another important indicator of reproductive health (Figure 3). The system of public health services for mothers and children has many crucial flaws. However, approximately 20-25% of the factors affecting the child mortality rate are of a purely medical character. Therefore we can not expect an

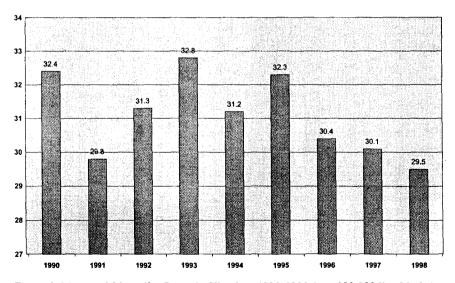


Figure 2. Maternal Mortality Rates in Ukraine, 1990-1998 (per 100,000 live births)

appreciable decrease in reproductive losses without a radical improvement of socio-economic conditions.

In most cases, mortality among children under one year of age is caused by conditions arising in perinatal period – from the 28th week of pregnancy until the end of first seven days of an infant's life (47.3% in 1998) and by congenital defects (35.9%). Positive trends have been observed: stillbirth, neonatal mortality (from the moment of birth up to 28 days of life) including early neonatal (during first seven days after birth) rates have decreased in 1998 compared to 1997. An analysis of the structure of perinatal mortality reveals that 36.3% of children in 1998 died during the antenatal period (from 28-th week of pregnancy up to the beginning of delivery), 18.5% due to intra-natal mortality (during delivery) and 45.2% during the postnatal period (during the first week of life). Thus, 63.7% of women who lost a child sought obstetric assistance with a living fetus. In these cases the final result of pregnancies depended largely on the quality of medical care provided during birth and for infants during the first days of life. Forty seven percent of children who died during the perinatal period were born prematurely. According to data from the Research Institute of Pediatrics, Obstetrics and Gynaecology of the National Academy of Medical Sciences, more than 20% of women whose children died in the perinatal period had previously experienced adverse conditions: 15% worked in harmful and hard conditions, 9% had harmful habits. Among the causes of perinatal mortality, the most common was intrauterine hypoxia and asphyxia of the

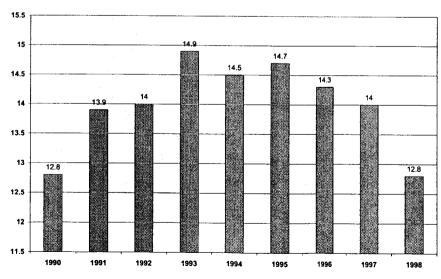


Figure 3. Infant Mortality Rates in Ukraine, 1990-1998 (per 1,000 live births)

fetus, and the second most common was congenital defects in development, and the third most common was traumas during delivery.

A mother's health is determined to a large extent by the conditions of her development in childhood and in her teenage years. An analysis of the state of teenaged girls' health demonstrates that the frequency of anemia, diseases of the reproductive organs and genital-urinary system increases significantly in this group (Table 1).

Teenagers' health has worsened considerably as a result of the increasing frequency of sexually transmitted diseases (STDs), tuberculosis and HIV/AIDS. The frequency of these diseases tends to increase during economic recession, as is occurring in Ukraine. The considerable difference in the incidence of STDs depending on sex is of special note (Table 2).

Table 1.

Incidence of Anemia, Diseases of Genital-urinary and Cardiovascular Systems among Teenager girls in Ukraine, 1990-1998

Diseases	Number of cases per 100 000 girls in the age of 15-17								
	1991	1992	1993	1994	1995	1996	1997	1998	
All diseases	5269.2	5592.9	6079.9	5850.6	6403.4	6243.7	7065.4	7664.2	145.5
Anemia	8.5	11.9	20.3	27.8	34.0	42.2	44.8	57.2	672.9
Inflammation of uterus appendages	20.1	24.9	31.6	38.6	42.8	58.8	64.9	80.2	399.0
Menstruation disorders	62.3	81.7	103.4	105.1	120.9	136.1	159.3	197.6	317.2
Morbidity by illnesses of genital- urinary system	189.5	272.6	343.9	372.0	447.4	525.7	609.8	708.2	373.7
Cardiovascular diseases	39.1	49.0	45.5	44.3	46.0	43.8	53.2	63.7	162.9

Source: Data of the Ministry of Health of Ukraine

Table 2. Incidence of STDs among Children and Teenagers, 1990-1998

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Diseases	Sex	1990	1991	1992	1993	1994	1995	1996	1997	1998	1998 in % to 1990
	Inc	idence a	mong c	hildren	(per 100	0,000 pc	pulatio	n aged 0	1-14)		
Gonorrhea	Female	9.7	9.3	11.2	12.3	15.2	11.4	8.9	7.8	6.2	63.9
	Male	0.44	0.52	0.95	0.93	1.4	0.9	0.8	0.6	0.5	113.6
Syphilis	Female	0.24	0.14	0.56	1.2	2.0	4.4	6.37	7.6	7.6	3167
	Male	0.14	0.04	0.49	0.64	0.95	2.55	4.03	5.32	5.5	3929
	Incid	lence ar	nong tee	nagers	(per 100	0,000 pc	pulatio	n aged 1	5-17)		
Gonorrhea	Female	159.7	143.9	176.2	185.3	188.7	142.9	115.3	90.4	70.4	44.1
	Male	103.4	102.0	134.0	142.4	98.6	129.7	106.9	77.7	61.9	59.9
Syphilis	Female	9.7	26.3	32.0	76.4	158.7	260.5	332.6	292.4	239.9	2473
	Male	4.1	5.2	12.9	25.1	50.6	82.5	107.2	81.7	72.2	1761

Source: Data of the Ministry of Health of Ukraine

The reliability of the data on the positive situation concerning the incidence of gonorrhea among children and teenagers over the past seven years is to be questioned if compared to the manifold increase in the incidence of syphilis. We can assume that many cases of gonorrhea — which is easier to treat than syphilis — are not reported because of the desire to keep the disease a secret. The high rate of incidence of STDs among children and teenagers requires urgent measures aimed at improving hygiene and sex culture, organizing specialized establishments for the early diagnosis of STDs, and manufacturing and maintaining available and reliable means of protection from STD infection.

The decrease in living standards during the crisis has resulted in a significant worsening in women's health, which is revealed by the decrease in life expectancy. In 1990-1995 life expectancy among women decreased by 2.3 years. An increase of 1.2 years was observed during 1996-1998. However, this trend can not be trusted completely.

The increase in the incidence of tuberculosis is a cause for concern. In 1990 17.8 per 100,000 women suffered from active forms of tuberculosis whereas in 1998 this indicator was 29.2. There has been an unprecedented increase in the incidence of syphilis among women. The indicator rose from 6.2 cases per 100,000 in 1990 to 134.8 in 1998 (Figure 4) which creates a favorable environment for the spread of HIV infection.

There has been a rapid increase in the incidence of HIV-infection since 1995 (Table 3). During 1995-98, the number of individuals infected with HIV increased 16.5 times. According to official data, at the end of 1998 there were 24,765 HIV-infected individuals in Ukraine including 739 children under the age of 14. About 50% of HIV-infected children contracted the disease during gestation from HIV-infected mothers. There are HIV-infected individuals registered in all regions of Ukraine. Drug users make up 78% of those infected. So, the most widespread way for disease transmission is parenteral (75-80% of revealed cases of HIV-infection in the regions of Ukraine).

There are 808 AIDS patients registered in Ukraine. Most of the registered HIV cases have been observed among individuals aged 20-29. The incidence infection among young people aged 12-19 years has also been increasing. According to data of the sero-epidemiological monitoring of HIV-infection in Ukraine, 40,091 cases of HIV-infected persons have been diagnosed from 1987 through 1998. As is well known, registered HIV/AIDS cases make up only an insignificant portion (about 10%) of the actual number of those infected.

Preventing sexually transmitted diseases requires efforts to form a culture of healthy lifestyles and serious educational work. The problem of gender and sex education for children and teenagers is closely connected to their overall development and forming the necessary preconditions for sustainable human development in

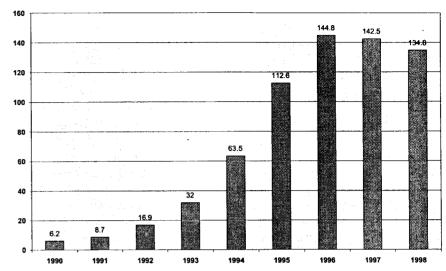


Figure 4. Incidence of Syphilis among Women in Ukraine, 1990-1998 (per 100,000 women of all ages)

Table 3.

Dynamics of Registered HIV/AIDS Cases and Numbers of Deceased from AIDS in Ukraine, 1987-1998

	1987- 1993	1994	1995	1996	1997	1998	Total
Total number of HIV-infection cases	354	44	1499	5422	8934	8512	24765
including:							
- among citizens of Ukraine	152	31	1490	5400	8913	8497	24483
- among foreigners	202	13	9	22	21	15	282
- among children	16		12	99	210	402	739
Total number of persons with active AIDS	24	13	45	146	193	400	821
Including:							
- among citizens of Ukraine	22	10	45	143	189	399	808
- among foreigners	2	3		3	4	1	13
- among children	5	1	1	10	5	15	36*
Total number of deceased from AIDS	13	5	20	70	85	156	343*
including:							
- among citizens of Ukraine	13	2	19	69	82	154	333*
- among foreigners		3	1	1	3	2	10
- among children	4		1	6	4	9	24

Source: Data of the Center for AIDS Prevention of the Ministry of Health of Ukraine

\*The total is without disaffirmed diagnoses.

Ukraine. Despite the importance of this problem, efforts to address these issues have been insufficient both in families and schools. According to data of «Health-1996» survey, 19.7% of fathers do not talk to children on issues of sexual development, sexual behavior and family relations at all; 8% of the fathers consider this unnecessary or do not know how to do so.

The poor state of health among teenaged girls affects health indicators among pregnant women. The number of cases of extra-genital pathologies (diseases not connected to pregnancy) has increased among pregnant woman (Table 4).

During 1990-1998 the incidence of anemia among pregnant women increased 4.5 times, diseases of genital-urinary system 3.2 times, and diseases of the blood circulation system 2 times. In 20% of the cases, an extra-genital pathology was accompanied by a serious obstetric complication, which worsens the prospects for and consequences of birth. Therefore, pregnant women with extra-genital pathologies require the monitoring not only of an obstetrician, but also of a physician during their pregnancy. This task can be carried out by organizational obstetric-therapeutic-pediatric complexes or by family doctors.

Women's reproductive health is also affected by the high frequency of extrauterine pregnancies. Annually, 14-15,000 operations are conducted on women with extra-uterine pregnancies — in other words 1.12-1.16 cases per 1,000 women of reproductive age. Surgical intervention is very rarely conducted with the preservation of a fallopian tube, which can result in a rise of infertility.

As the Table 5 shows, in recent years the number of deliveries has been increasing while the number of abortions has been decreasing. The number of pregnancies decreased by 42.4% between 1991 and 1998, the number of deliveries by 34.2%, and the number of abortions by 47.9% (basically as a result of a reduction in the number and percentage of spontaneous abortions, induced abortions at the request of the women and mini-abortions by the vacuum method).

Table 4. Frequency of certain Extra-genital Diseases among Pregnant women in Ukraine, 1990-1998 (per 100 pregnant women)

Diseases	1990	1991	1992	1993	1994	1995	1996	1997	1998	1998 in % to 1990
Diseases of blood circulation system	3.2	3.5	4.0	4.4	4.7	5.0	5.4	5.8	6.4	200
Diseases of genital-urinary system	3.2	5.0	5.8	6.5	7.2	7.6	8.1	9.2	10.4	325
Anemia	8.7	12.7	16.5	20.4	24.1	27.9	32.1	35.5	39.4	453

Source: Data of the Ministry of Health of Ukraine

Of the total number of births in recent years, 0.5% occurred among minors (under the age of 14), and 4.5% among teenage women (under 18 years). The maternal mortality rate in this age group is high and indeed makes up 6% of all cases of maternal mortality. Pregnancy at an early age causes anxiety not only medically, but also socially because of the lack of preparedness of young women for motherhood.

A low level of somatic and reproductive health prior to pregnancy and numerous complications during pregnancy result in the high frequency of complicated deliveries (Figure 5).

During last eight years the number of complicated deliveries increased by 18.7%. The increase concerns particularly complications and anomalies during birth. In 1998 there were 115.8 such complications per 1000 pregnancies. The incidence of hemorrhage during birth and in the post-natal period as well as the number of post-natal septic complications increased considerably. This has been caused by the interaction of several factors. In addition to the worsening of the health of pregnant women, important factors include the following: quality of medical care; maintenance by necessary medicines; and equipment and preparedness of a hospital to administer emergency medical care. Abortion is one of the main causes of complications during pregnancy and birth since they harm women's health and increase the maternal mortality rate. Compared to other countries, the frequency of abortions in Ukraine is high.

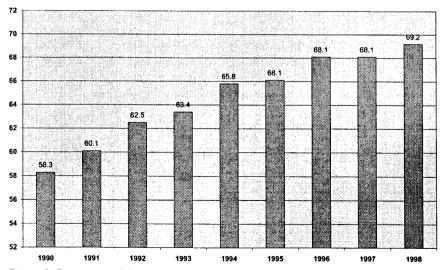


Figure 5. Frequency of Complicated Deliveries in Ukraine, 1990-1998, %

#### Abortions

In 1998, 54 pregnancies out of 100 ended in abortion – that is there are 1.2 abortions for every birth. These indices fluctuated by region from 30 to 76% and from 0.4 to 2.1 respectively. The number abortions has been decreasing in recent years (Table 6), a decrease is more significant than that of the births number. In 1991-1998 the number of abortions fell by 47.9% while number of births decreased by 33.5%.

Abortions induced at the request of women (48.1 % in 1998) and mini-abortions (34.8 % in 1998) make up the largest portions of all abortions. In these cases abortions are used as a means of family planning (Table 5). With the development of contraception this category of abortions will be the main target for reduction efforts. The quantity of illegal abortions increased by 29.8% and there was an appreciable reduction in the number of criminal abortions. The increase in the portion of abortions conducted for medical and social factors is of special note – from 1.0% in 1991 to 2.5% in 1998. This is connected with a decline in the standard of living of the majority which has occurred during the socio-economic crisis and also due to an extension of eligibility to abortion of higher age groups. Earlier, women below 16 did have the right to abortion, while this age has been extended till 18 since the year 1993.

Table 5. Changes in the Structure of the Results of Pregnancies in Ukraine, 1990-1998

		Total				inc	luding aborti	ons		
	pregnan-	deliveries	abortions	spontane-	induced at	Mini-	induced	Illegal	incl	ıding
	cies			ous	the	abortion	for			_
Years			İ		request of		medical			
					the		and social			
			l		women		reasons		criminal	undefined
					Absolute	numbers				
1991	1591456	634434	957022	64736	522135	325001	9590	35560	1780	33780
1992	1503044	599537	903507	59095	472426	329781	9577	32628	803	31825
1993	1386291	552839	833452	47244	423503	308134	7480	47091	535	46556
1994	1300112	527483	772629	45175	383375	291584	7794	44701	486	44215
1995	1208553	492861	715692	43556	359568	262262	7593	42713	415	42298
1996	1138994	474838	664156	39962	335516	238604	8588	41486	392	41094
1997	1014061	442582	571479	39580	276848	205959	8336	40756	346	40410
1998	915919	417298	498621	32751	239885	173776	12451	39758	299	39459
1998 as %	57.6	65.8	52.1	50.6	45.9	53.5	129.8	111.8	16.8	116.8
of 1991			L		<del></del>		L	-	L ,	L
			tal	Tot	al number o	of abortion	s, %		tal number	
		numl	ncies, %					illeg	al abortion	s, %
1991	100.0	39.9	60.1	6.8	54.6	34.0	1.0	3.7	5.0	95.0
1992	100.0	39.9	60.1	6.5	52.3	36.5	1.0	3.6	2.5	97.5
1993	100.0	39.9	60.1	5.7	50.8	37.0	0.9	5.7	1.1	98.9
1994	100.0	40.6	59.4	5.8	49.6	37.7	1.0	5.8	1.1	98.9
1994	100.0	40.8	59.2	6.1	50.2	36.6	1.1	6.0	1.0	99.0
1996	100.0	41.7	58.3	6.0	50.5	35.9	1.3	6.2	0.9	99.1
1997	100.0	43.6	56.4	6.9	48.4	36.0	1.5	7.1	0.9	99.2
1997	100.0	45.6	54.4	6.6	48.1	34.8	2.5	8.0	0.8	99.2
1778	1,00.0	43.0	34.4	0.0	1 40.1	J4.6	4.3	0.0	J 0.8	1 33.2

Source: Data of the Ministry of Health of Ukraine

Overall, the number of abortions among women of reproductive age in 1998 was distributed as follows: 79.1% of all abortions occurred among women aged 18-34 years, 18.3% among women 35-49 years, 2.6% among teenaged girls aged 15-17 years, and 0.05% among girls under 14 years. In all age groups the purpose of the abortion was to end an obviously undesired pregnancy. The highest frequency of all kinds of abortions was observed among women aged 18-34, except for abortions performed for medical reasons (the highest frequency of this type of abortions was observed in the age group 15-17 years). Special attention should be paid to abortions among girls under 14 years (236 cases were registered in 1998) and among teenaged girls aged 15-17 years (12901 cases in 1998).

In recent years the situation has improved. There has been no increase in the number of abortions among girls under the age of 14 and teenagers aged 15-17. Among girls aged 10-14 years who interrupted their pregnancy, the number having an abortion for the first time increased from 47.4% to 94.0% and, respectively, the number of cases of discontinued subsequent pregnancies decreased (Figure 6). This was promoted by the creation of a network of family planning centers and gynaecological consulting offices for children and teenagers. These institutions work with girls who have already become pregnant. They recommend advanced methods for prevented unwanted pregnancies, conduct hygiene and educational work among the teenagers and youth, and work on forming and appropriate sex culture.

Abortions cause a number of serious complications, both immediate – during the operation – and afterwards. The number of women who died as a result of an

Table 6.
Number and Frequency of Abortions in Ukraine, 1990-1998

	Absolute num-		Number of	abortions	
Years	ber of abortions, including mini- abortions	Per 1000 women aged 15-49 years	Per 100 pregnancies	Per 100 deliveries	Per 100 born alive
1990	1019038	82.5	61.1	157	155
1991	957022	77.6	60.1	151	152
1992	903507	73.2	60.1	151	151
1993	833452	66.8	60.1	151	149
1994	772629	61.2	59.4	146	148
1995	715692	56.5	59.2	145	145
1996	664156	52.0	58.3	140	142
1997	571479	44.7	56.4	129	129
1998	498621	39.0	54.4	119	119
1998 as % of 1990	48.9	47.3	89.0	75.8	77.3

Source: Data of the Ministry of Health of Ukraine

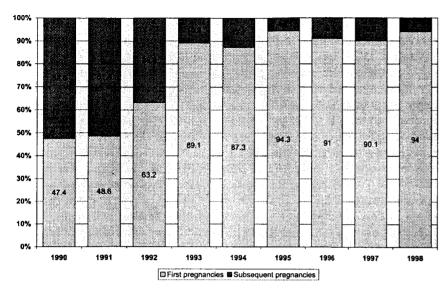


Figure 6. Percentage of the First and Subsequent Pregnancies Discontinued by Abortion among Girls Aged 10-14 Years in Ukraine, 1990-1998

abortion is striking; in 1998 there were 26 deaths following an abortion, or 0.05 per 1000 abortions, registered in 1998. One of these deaths was not caused by factors connected to pregnancy and seven deaths occurred as a result of an abortion that was not performed in a medical establishment. Between 1990 and 1998 there was a twofold decrease in the number of women who died after having an abortion and a threefold decrease in the number of deaths occurring as a result of an abortion that was not performed in a medical establishment. The decision of Cabinet of Ministers of Ukraine adopted in 1993 «On the order of an abortion during the period from 12 to 28 weeks of pregnancy» along with an appropriate order of the Minister of Health of Ukraine played a certain role in improving of these indices. The documents extended medical and social reasons for performing an abortion. Abortions in late stages of pregnancy were legalized and provisions made for carrying them out in specialized and multi-profile hospitals where necessary assistance could be provided in the event of complications.

One of the consequences of numerous abortions among women of reproductive age is **miscarriage**. This is a very serious problem in Ukraine since the frequency of miscarriages has increased (Figure 7).

The percentage of miscarriages out of the total number of pregnancies increased considerably as a result of abortions. In 1998 this percentage increased by 1.8 times in comparison to 1990. Miscarriage generates appreciable perinatal losses. About

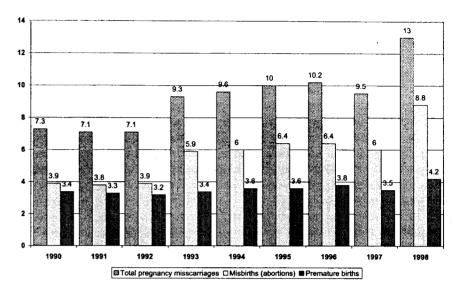


Figure 7. Percentage of Miscarriages in Ukraine, 1990-1998 (according to the data of female advisories)

60% of stillbirths are premature births and from 50% to 70% are neonatal births. Abortions and extra-genital diseases are the most frequent causes of premature pregnancy termination.

Moreover, abortion is the main cause of **infertility** – one of the major criteria of reproductive health. Inflammation of the fallopian tubes as a result of an abortion causes obstruction in them. More than 200,000 inflammatory diseases of the fallopian tubes and ovaries are recorded annually, of which 130,000 are first occurrences among women aged 18 years. Even among teenagers aged 15-17 years about 10% have inflammatory diseases of the reproductive organs. In addition to abortions, STDs also cause inflammatory diseases of the female reproductive organs.

It is necessary to address infertility among married couples. Sample surveys in various regions of Ukraine and census results indicate that there are about one million infertile married couples in Ukraine.

#### Family planning

Family planning plays an important role in the improvement of reproductive health. It helps married couples and individuals resolve issues of reproduction. By preventing undesired pregnancies and reducing the number of pregnancies in high-risk groups together with morbidity and mortality rates, family planning promotes the maintenance and improvement of health. The issue of contraception use in Ukraine is still extremely

important. The main problems are as follows: the absence of domestic manufacturers of contraceptives, expensive foreign brands and attitudes of Ukrainian women towards contraceptives based on popular belief that they are harmful, etc. Thus the number of women who use contraceptives continues to be limited.

The high incidence of abortions, the less-than-ideal situation concerning contraception and the frequency of unwanted pregnancies are closely interconnected. The ratio of unwanted pregnancies to the number of intrauterine devices in use in Ukraine is contradictory (Table 7). The number of unwanted pregnancies per 1000 women of reproductive age decreased by 52.5% over the last 7 years, whereas the number of IUDs inserted fell by 59.1%. This demonstrates the low level of prevention of unplanned pregnancies. According to data of domestic and foreign authors the number of abortions is reduced significantly when 25-30% of the women of reproductive age are using IUDs. Only 14.7% of Ukrainian women are using them. Oral contraceptives in Ukraine are also under-utilized – indeed, they are used by only 4.8% of women.

#### Measures to improve reproductive health

In conclusion, we can assert that the following features characterize reproductive health in Ukraine:

- Constant worsening of the health of pregnant women, which causes a higher rate of maternal and child mortality in comparison to economically developed countries;
- Increase in chronic diseases among children and teenagers;
- Substantial general reproductive losses, maternal and child mortality in particular;

Table 7.
Unwanted Pregnancies and the Number of Intrauterine Devices (IUD) Inserted,
1991-1998

	Unwanted	pregnancies	IUD ente	ered
Years		Per 1000 women		Per 1000 women
	Absolute number	aged 15-49 years	Absolute number	aged 15-49 years
1991	848916	68.8	501359	40.6
1992	803010	65.0	503364	40.8
1993	737694	59.1	433434	34.7
1994	680879	53.9	333374	26.4
1995	627081	49.5	281946	22.3
1996	578885	45.3	257749	20.2
1997	487627	38.2	241258	18.9
1998	418249	32.7	212310	16.6
1998 in % to 1990	49.3	47.5	42.3	40.9

Source: Data of the Ministry of Health of Ukraine

- A significant number of abortions that continue to be the main method of family planning, and an increasing number of abortions among first time pregnant and juvenile women.

In view of this, Ukrainian policy priorities for the 1990s have been set in the fields of protection of reproductive health, maternity, childhood and family.

The following international legal documents ratified by Ukraine play important roles in the development of policy in the field of public health services: Convention on Human Rights, Convention on the Rights of the Child, and Convention on the Elimination of All Forms of Discrimination Against Women. The program documents Ukraine should implement in the coming decade are the following: Program of Action adopted at the International Conference on Population and Development (Cairo, 1994), and the Declaration and Platform of Action adopted at the Fourth World Conference on the Status of Women (Beijing, 1995). Ukrainian public policy is based on these documents. The legal framework for state activity in the sphere of public health services has become stronger with adoption of the Constitution of Ukraine, Law on Education, Foundation of Legislation on Public Health Services, Law on State Assistance to Families with Children, etc.

Since Ukraine became an independent state a series of strategic national programs have been adopted: Long-term Program on the Improvement of the Status of Women, Family, Protection of Maternity and Childhood, National Program on Family Planning, National Program «Children of Ukraine», etc. The National Plan of Action for 1997-2000 «On the Improvement of the Status of Women and their Role in Society» was approved in 1997.

The National Program on Family Planning adopted in 1995 is based on an analysis of the frequency and age composition of abortions, the prevalence of contraception use and other indices. The purpose of this program closely coincides with goal proclaimed by the Plan of Action of the International Conference on Population and Development which calls for the provision of married couples and individuals with the opportunity to make free and responsible decisions regarding number of children and time of their birth, the provision of the necessary information and means for carrying out these decisions, as well as guaranteeing the availability of the full spectrum of safe and effective contraception methods.

The National Program of Family Planning has following strategic objectives:

- Form national institutions for family planning;
- Prepare medical and educational personnel to work on family planning;
- Increase the availability of family planning services;
- Meet the population's contraception needs;
- Prevent undesired pregnancies and reduce the number of high-risk pregnancies;
- Create an infrastructure for the treatment of infertility;

- Raise the level of knowledge in the sphere of gender and sex culture as well as family planning, particularly through media and the education system.

The Program objectives concern not only women – as is the common societal perception – but also men. After two years of the Program's implementation there have already been certain results such as a decrease in the frequency of abortions. With respect to abortion, the policy has been that to legalize the practice of abortion and everything related to it is part of the universal values of self-determination of the individual and is part of guaranteeing human rights.

The current situation requires the implementation of a whole series of measures outlined in the National Program on Family Planning. However, improving reproductive culture among citizens and preparing medical personnel is the first priority. This involves educating obstetricians and gynaecologists, gynaecologists for children and teenagers, physicians, paramedical personnel and social workers on issues of family planning. During 1997-1998, 3200 persons took part in such courses. A network of family planning centers and centers for the reproductive health of teenagers and youth has been created. Twenty-five regional family planning centers as well as 478 consulting-rooms for family planning operate at central district and town hospitals. Work on family planning and sex education among adolescents has been carried out under the supervision of the Center for Family Planning at the Research Institute of Pediatrics, Obstetrics and Gynaecology of the National Academy of Medical Sciences. Services in obstetric establishments need to be made more accessible to women. In consideration of the fact that a consistent downward trend in the health of pregnant women has been observed, a more effective medical care system is needed both to detect pregnancy and to monitor its progression.

In addition to implementing the above-mentioned programs, inter-sectoral cooperation among businessmen, regional representatives of authorities and representatives of public health services needs to be supported in order to make progress in improving the overall situation of women — particularly women's reproductive health. Public health services should be reorganized. An Institute of Family Medicine should be introduced with the purpose of maintaining continuity in protecting the health of both men and women throughout their life cycle. Meeting the strategic objectives on reproductive health depends also on forming healthy lifestyles and decreasing poverty's negative influence on health.

### **Fertility**

Currently couples are forced to substantially limit the size of their families in the main because of a decrease in living standards and due to the deterioration of general and reproductive health. Whereas fertility stabilized during the seventieseighties, during the nineties there was a trend indicating a rapid decrease. In recent years the value of absolute and relative fertility indices has decreased particularly in urban areas. The total number of live births decreased from 657,202 in 1990 to 419,238 in 1998. In 1998 the crude birth rate was 8.3 births per 1,000 inhabitants which is 36.2% less than in 1990. The total fertility rate decreased from 1.85 in 1990 to 1.19 in 1998 – from 1.68 to 1.02 in urban areas and from 2.33 to 1.63 in rural areas (Table 8, Figure 8). A further decline in fertility means the loss of favorable demographic prospects for Ukraine. Even in villages, where fertility was always traditionally higher than in urban areas, there has been a decrease to a level insufficient for population replacement since 1992. The difference between this indicator in urban and rural areas increased during the years of growing economic and social crisis, since fertility in urban areas is declining faster than in rural areas.

The lowest fertility rate has been observed in industrially developed oblasts and in the Autonomous Republic of Crimea. In oblasts where fertility is very low for a peacetime setting, abortions are most widespread.

As a result of a decrease in marriage and an increase in divorce rates, the percentage of children born out of wedlock has increased: in 1990 12.2% were born out of wedlock and 16.2% in 1998. During 1989-1992 the number of children born out of wedlock in rural areas was higher than in urban areas but after 1993 the situation changed. (Table 9).

The overwhelming majority of children (84.1% in 1998) are being born by women under the age of 30. In urban the figure is 83.3%, in rural areas it is 85.4%.

Table 8.
Birth Rates and Total Fertility Rates in Ukraine, 1990-1998 (%)

	Crude	birth r	ate (pe	r 1000	Ger	neral fei	rtility ra	ate*	To	Total fertility rate**			
		popul	ation)										
Years	Urban	Urban	Rural	Urban	Urban	Urban	Rural	Urban	Urban	Urban	Rural	Urban	
1	and	areas	areas	as%	and	areas	areas	as%	and	areas	areas	as%	
}	rural			of	rural			of	rural		į	of	
	areas			Rural	areas			Rural	агеаѕ			Rural	
1990	12.7	12.7	12.7	72.3	53.3	49.0	65.1	75.3	1.848	1.682	2.328	72.3	
1991	12.1	11.9	12.6	68.6	51.3	46.2	64.8	71.3	1.771	1.590	2.317	68.6	
1992	11.4	11.0	12.5	65.3	43.8	42.6	64.1	66.5	1.667	1.465	2.242	65.3	
1993	10.7	10.1	12.0	64.6	44.4	38.6	60.8	63.5	1.551	1.353	2.096	64.6	
1994	10.0	9.3	11.6	63.5	41.2	35.3	57.9	61.0	1.453	1.259	1.984	63.5	
1995	9.6	8.8	11.1	63.4	38.7	33.0	54.7	60.3	1.379	1.192	1.879	63.4	
1996	9.1	8.4	10.7	63.5	36.6	31,1	51.7	60.2	1.315	1.135	1.787	63.5	
1997	8.7	8.0	10.3	63.5	34.6	29.4	48.8	60.2	1.250	1.079	1.699	63.5	
1998	8.3	7.6	9.9	76.8	32.8	27.7	46.4	59.7	1.188	1.019	1.626	62.7	
1998 as %	65.4	59.8	78.0		61.5	56.5	71.3		64.3	60.6	69.8		
of 1990		l	l		<u> </u>		L	<u></u>		<u> </u>	L		

<sup>\*</sup>Correlation of all births to all women of reproductive age (15-49).

Source: Data of the State Statistics Committee of Ukraine

<sup>\*\*</sup>The average number of children one woman would bear during her lifetime maintaining the existing age-specific birth rates for given year. Calculated by one-year age intervals as sum of age-specific fertility rates. For 1998 – preliminary data.

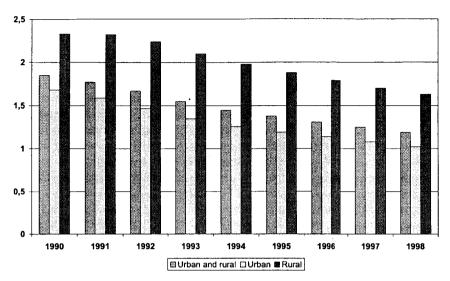


Figure 8. Fertility Rates in Ukraine, 1990-1998

Table 9.

Percentage of Children Born Out of Wedlock (as % of total number of births)
in Ukraine, 1990-1998

Areas	1990	1991	1992	1993	1994	1995	1996	1997	1998	1998
										as %
							ĺ			of
							l			1990
Urban and rural	11.2	11.9	12.1	13.0	12.8	13.2	13.6	15.2	16.2	144.6
Urban	10.5	11.6	12.0	13.1	13.0	13.4	13.8	15.4	16.5	157.1
Rural	12.6	12.5	12.4	12.8	12.6	12.8	13.3	14.8	15.5	123.0

Source: Data of the State Statistics Committee of Ukraine

Compared to the pre-crisis period, fertility has decreased in all age groups, both in urban and in rural areas. Over a long period of time an increase of fertility had been observed among women in the youngest age groups. However, in the crisis years the increase ended. The most drastic decline was observed among women aged 30-44. The smallest decrease was observed among women in the youngest age group. Thus, under crisis conditions the decline in fertility has had such age-specific regularity – the older the women, the more significant the decrease.

Data on changes in parity composition of newborns are of great interest, but unfortunately this data ceased to be recorded for such analysis in 1995. The Ukrainian Ministry of Justice revised and shortened the program for registering vital civil

events such as, births, deaths marriages etc. (which is the primary source of demographic statistics). The last year for which we have data on the distribution of newborns by parity is 1994. In 1994 the number of the first children increased compared to 1990, while the portion of second, third and next children decreased. The figures for 1994 are as follows: first born children – 56.9% (62.7% in urban areas, 47% in rural areas), second born children –29.9% (28 and 33% accordingly). Families with the average number of children were more common among rural population, but the age and sex composition of such families was affected by migration. Namely, until 1989, crude fertility rates in rural areas were lower than in urban areas, while intensity of fertility in rural areas was higher. Since 1991 that correlation has reversed due to a more rapid fall of age-specific fertility in urban areas during the crisis.

The declining birth rate is reflected in family structure. According to the data of the last population census, even in 1989 52% of families with children under 18 years were single-child families. In urban areas 55% of families had one child, and 44.0% in rural areas. 39.5% families had two children, and only 8.4% families had three or more children. The number of single-parent families and frequency of childlessness is growing. According to the data of «Health-1996» surveys, about 20% of all women of reproductive age do not have children.

Data from sociological surveys show that on average married women desire two children but this is impossible due to current difficulties. In their present living conditions women are not able to have the desired number of children because majority of the population has been pushed into borderline poverty. According to the same survey, 43% of women cited an inadequate level of income as the main reason for not having as many children as they desired.

Fertility in Ukraine is extremely low and continues its decline. The current fertility rate in Ukraine is the lowest ever in post-war years. Negative trends in fertility rates are rapidly gaining momentum and depopulation continues.

Among economically developed countries, only Italy, Spain, San-Marino and Hong-Kong have such level of total fertility rates (TFR) as Ukraine (1.2). In Ukraine's urban areas TFR has decreased to an unprecedented low level. We should note that globally, the demographic situation is indicates decrease in fertility as well, yet this decrease is accompanied by high life expectancy, which is not the case in Ukraine. Today the demographic situation in Ukraine is one of the most unfavorable in the world.

Under the current conditions fertility rate has decreased to a level insufficient for population replacement which is the result of the fact that satisfying parenthood needs competes with a series of other basic needs. The conditions for raising children in the families continue to worsen. Even in non-crisis conditions family income was insufficient to meet population reproduction needs since it did not cover all

expenditures necessary for having and raising a second or third child. In families of the most qualified professionals, wages were never adequate for raising even one child who would share the same living standards as its parents. During the years of social-economic crisis the situation has worsened still further. The significant decline in living standards of the overwhelming majority of citizens has had an immediate effect on having and raising children. For the majority of the population salaries, as a principal source of income, are insufficient to cover the maintenance and upbringing of the desired number of children. Population reproduction at the level necessary for the family and society is not ensured economically. As a result, most families opt for having one child or often remain childless.

Another factor that influences fertility is the fact that as in other countries in transition, poverty in Ukraine has «women's face.» Women's salaries are on average lower than those of men, although there are no significant differences in educational level between men and women; women are the majority of the unemployed and those working under conditions of forced part-time employment.

Yet another important factor in the decline of fertility is the low level of pensions. Because pensions for elderly are below the poverty line (i.e., guarantees for the aged are not provided economically) the middle-aged generation has to support not only their children, but also the elderly. That situation becomes an important factor of further decline in the birth rate.

The additional factors affecting the decline of fertility are the deterioration of the pre-school education system and poor housing conditions.

The decline in fertility during the crisis years is connected to some extent with the decrease of marriages and increase of divorces. The marriage rate has decreased from 9.3% in 1990 to 6.2% in 1998. The rate of divorce was particularly high in 1992-1993 – 4.0-4.3% whereas in 1990 it was 3.8% in 1998 it was 3.6% Whereas in 1990 the difference between the crude marriage and divorce rates was 5.6% in 1998 it was only 2.6%.

The decline of the tradition of having many children is a common demographic trend in economically developed countries. However, there is a threshold of fertility decline that should not be crossed, because with it, preconditions for a favorable demographic situation will be lost. That threshold corresponds to a 2-3-child family, which ensures a little extended population reproduction. Ukraine crossed that threshold a long time ago.

Targeted measures are needed to improve fertility. Family allowances are the main means of providing social support to families with children but they are very small. For example, at the end of 1998, the monthly family allowance for mothers on maternity leave with children under the age of three was UAH 16.6 (\$4.6). Family policy stipulates that women employees – particularly those with young children – be given privileges by enterprises. These privileges no longer adequate

to the conditions of market economy what results in women's exclusion from enterprises.

Whereas the increase in mortality rates among both men and women has been caused mainly by a declining standard of living, the unprecedented decline in fertility has been caused mainly by the change in the status of women in society and by the worse conditions for raising children. This has to do not only with crisis conditions (unemployment, fall in the value of salaries etc.), but also with the fact that currently, even those achievements women had attained prior to the crises are disappearing. Previously pre-school child care institutions played an important role in allowing women to combine professional life with motherhood but this system is itself in crisis which therefore limits women's capacity to participate in public life. From 1990 to 1998 the number of such institutions dropped from 24,500 to 17,600 and the number of children enrolled in them declined from 2,428,300 to 1,102,600. From 1990 to 1998 the enrolment of children of the relevant age groups in such institutions dropped from 57% to 38%. The quality of services in the majority of pre-school child care institutions has also fallen substantially while simultaneously the cost has increased. Presently, pre-school institutions are too expensive for a significant portion of the population and unattractive to others.

A reversal of the unfavorable dynamics of fertility should be connected first of all with overcoming the socio-economic crises. However, certain low-cost measures should be implemented today. It is important to adhere to the important principle of population policy — do not undermine previous achievements. Inasmuch as any direction of social policy influences directly or indirectly population reproduction, demographic problems in general and the problem of fertility in particular should be addressed in the context of an entire series of socio-economic measures. Therefore, main priority is to ensure that all aspects of social-economic policy on such issues as wages and salaries, privatization, social security, housing and tax policy would reinforce the solution of demographic problems. This will assist not only in resolving urgent problems of demographic development but also the problems of developing a market economy. All major economic projects, laws and programs should be examined so that the least harm possible is caused to the population's health and reproduction.

## **The Aging Process**

The decline in fertility during the transition period led to the aging of the population – the most salient feature of the long-term changes in age composition in Ukraine. According to the last population census (1989), the rate of aging in Ukraine was very high: 18% of the population was 60 years and older (12.8% of men and 22.5% of women). At the same time, aging in urban areas is average (14.9% of population is 60 years and older), whereas in rural areas it is very high

(24.2%). In recent years the aging process has intensified in Ukraine (Table 10). The causes are as follows: the economic crisis has resulted in the worsening trends connected to population reproduction in Ukraine in previous decades; and a decrease of birth rate and a worsening of the mortality rate; migration during the transition period has resulted in further acceleration of the aging process.

The percentage of children aged 0-15 years in total population decreased between 1990 and 1999 particularly in urban settlements whereas percentage of people of pension age grew. By the beginning of 1999 persons aged 60 years and older made up 20.1% of the population (15.4% of men, 24.1% of women). The level of aging is especially high in rural areas. At the beginning of 1999 14.4% and 25.7% of the population was 60 years and older in urban areas and rural areas respectively. According to the E. Rossett scale, level of aging is very high among urban women and extremely high among rural women. Aging of the male population in urban areas is moderate but is very high in rural areas though lower than among the female population. Besides a higher rate of women aging, there is a higher longevity index (ratio of the population aged 80 years and older to the population aged 60 years and older). At the beginning of 1999 this ratio was 6.7% among urban men and 8.0% among rural men; among women it was 11.9% and 15.2% respectively.

The decline in fertility has contributed considerably to changes in the age composition. The age and sex composition of the population and how they are influenced by the recent decline in birth rate is demonstrated by the age pyramid (Figure 9). The reduction at the base of this pyramid during crisis years means a

Table 10.

Age Composition of the Population of Ukraine at the Beginning of 1990 and 1999 (%)

	Urbar	and rura	l areas	Ţ	Jrban area	as	F	lural area	s			
Age	1990	1999	1999 as	1990	1999	1999 as	1990	1999	1999			
			% of		İ	% of			as % of			
			1990			1990		1	1990			
		Male and female										
0-14	21.5	18.5	86.0	21.8	17.9	82.1	20.8	19.7	94.7			
15-59	60.2	61.4	102.0	63.0	64.7	102.7	54.5	54.6	100.2			
60 and over	18.3	20.1	109.8	15.2	17.4	114.5	24.7	25.7	104.0			
					Male							
0-14	23.7	20.4	86.1	23.8	19.7	82.8	23.4	21.9	93.6			
15-59	63.1	64.2	101.7	64.9	66.6	102.6	59.4	59.1	99.5			
60 and over	13.2	15.4	116.7	11.3	13.7	121.2	17.2	19.0	110.5			
					Female							
0-14	19.6	16.9	86.2	20.1	16.4	81.6	18.8	17.9	95.2			
15-59	57.7	59.0	102.3	61.3	63.0	102.8	50.4	50.7	100.6			
60 and over	22.7	24.1	106.2	18.6	20.6	110.8	30.8	31.4	101.9			

Source: Data of the State Statistics Committee of Ukraine

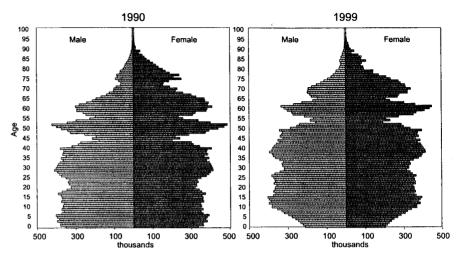


Figure 9. Age Pyramids of the Population of Ukraine at the Beginning of 1990 and 1999

reduction of Ukraine's favorable demographic and, consequently, socio-economic prospects.

The average age of the population demonstrates that the population is much older in rural than urban areas. At the beginning of 1999, the average age in rural areas was 39.8 years (36.2 among men and 42.8 among women) whereas in urban areas it was 37.2 years (35.0 among men and 39.2 among women).

The more intensive aging process in rural areas results in a higher dependency ratio than in urban areas (Table 11). At the beginning of 1999, per each 1000 able-bodied there were 768 non-able-bodied persons, including 695 in urban settlements and 1026 in rural settlements, which means that there are more non-able-bodied than able-bodied persons in rural areas. The number of children in the structure of the dependency ratio has decreased while the number of aged individuals has increased. At the beginning of 1999 these indices were 356 and 412, respectively. The dependency ratio in rural areas exceeds that in urban areas by 1.5 times. This is an essential structural demographic factor that has influenced the standard of living in cities and rural areas, and, consequently, the intensity of demographic processes.

It is necessary to note that in normal socio-economic conditions people of pension age are not an economic «burden» on anyone. In developed countries this socio-economic group is not defined as dependants of a family's working members. Currently, in developed countries pensioners contribute more to accumulation of national wealth than they spend on their own current needs during their economic activity and the size of their pensions depend on their previous personal contribution to national wealth accumulation. For this reason pensioners should not be considered dependants, but

Table 11.

Dependency Ratio in Ukraine at the Beginning of 1990 and 1999 (%)

	Urban	and rur	al areas	U	rban are	as	Rural areas		
	1990	1999	1999 as	1990	1999	1998 as	1990	1999	1999 as
l			% to			% to			% to
			1990			1990			1990
Total dependants	791	768	97.1	695	669	96.3	1026	1019	99.3
Including:									
Children and adolescents	411	356	86.6	394	327	83.0	451	430	95.3
Persons older than able-bodied	380	412	108.4	301	342	113.6	575	589	102.4

Source: Data of the State Statistics Committee of Ukraine

rather consumers-»rentiers» of capital accumulated by capitalization of the difference between their input and their expenditures. Society progresses when a generation leaves behind more than it has consumed. Today the situation with the distribution of the actual consumption fund is quite heavy. The size of pensions is extremely small. However, pensioners' increase of the demographic «burden» on working people is not the main cause of the situation. The current situation is the result of the fact that the overwhelming part of state «pension capital» and virtually all pensioners' personal savings disappeared during the unsuccessful attempt to reform the economy in the transition period. This together with the decline in production resulted in a situation when the average size of a pension is below the elementary survival level. At the beginning of 1999 pensions averaged UAH 60.7 (\$17).

The forecast for the period up until 2026 – approximately the length of one generation – put forward by the Department of Demography and Labor Force Reproduction (Institute of Economics, National Academy of Sciences of Ukraine) reveals that the most probable scenario is one in which the population will decrease to 42 millions persons by 2026 (urban – to 27 million, rural areas – to 14 million), individuals aged 60 and above will make up 24.6% of the population (19.5% of men, 29.2% of women). In other words, the aging process will intensify (Figure 10). The percentage of children will decrease from 18.5% in 1999 to 15% in 2026.

In the near and more distant future aging in urban settlements will increase due to the extremely low birth rate. In rural areas the aging process will slow down due to normalization of the age composition.

By the end of the forecasted period, the dependency ratio will change insignificantly (from 768 in 1999 to 793‰ by the beginning of 2026), but the number of children will decrease (from 356 to 288‰), and the number of old people will increase significantly (from 412 to 505‰). For these reasons the dependency ratio will increase in cities (from 669 to 787‰) and decrease in rural areas (from 1019 to 805‰).

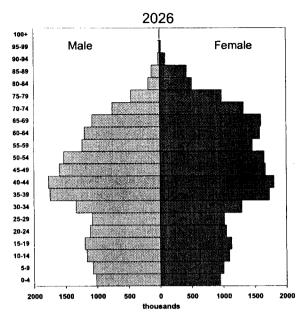


Figure 10. Age Pyramid of the Population of Ukraine at the Beginning of 2026 (Projection)

Thus, in the near and distant future population aging will remain an important problem for Ukraine. Therefore we face the urgent task of estimating general population aging and its consequences from a demographic and socio-economic perspective.

What influence does population aging on the reproduction of the Ukrainian population? It is well known that the reduction of relative and absolute number of youth is reflected in the number of children born. Aging of the population has resulted in a substantial decrease of reproductive potential which in turn is connected to the age composition of the population. We can conclude that Ukraine is losing the demographic capital accumulated by previous generations when the birth rate was higher.

How can the aging process be estimated from a socio-economic perspective? It is well known that there is a negative attitude toward this process. In research on the consequences of aging, elderly people are usually considered to be a conservative, inert element in socio-economic development. The important social functions of the elderly, who can be viewed as carriers of accumulated experience and as a stabilizing force in society, are virtually ignored. Therefore, we should search first for ways to delay aging and effectively use instead the vast experience of the elderly.

The negative view of aging prevents researchers and policy-makers from searching for effective ways of overcoming the social and economic difficulties that arise in connection with this process.

From our point of view, proposals aimed at rejuvenating the population by increasing the birth rate are doomed to fail. In countries where there is a low birth rate and poor economic conditions such methods are not successful for social and economic reasons. Such proposals do not make sense in prosperous countries not only because the low birth rate is part of the way of life, but also because of the success achieved in prolonging life expectancy. The aging process in economically developed countries is impossible to neutralize by affecting that part caused by an increase of «normal» age of death. Increasing the birth rate to a level sufficient to decrease the aging process is not realizable. Aging can not be overcomed by artificial measures. Furthermore, aging has negative socio-economic consequences connected first of all to the inability to effectively use the social, cultural and labor potential of seniors.

An analysis of the qualitative structure of the population in concrete social-economic conditions of life is needed since the aging process cannot be estimated only on the basis of study of changes in population age composition. The economy requires more and more highly qualified employed. The conclusion can therefore be drawn that the larger the number qualified professionals, the more advanced the nation is as a whole. We agree neither that youth easily adapt to the «overload» caused by an increase of social and professional labor mobility, nor that the younger generations have a number of essential advantages over elderly people. Today, there is no scientific evidence about the relationship between age and labor productivity even at a technical and economic level. There is also no concrete evidence about the correlation of age and efficiency of work for engineers, people engaged in science, arts, etc., where acquired experience is of special importance.

The comprehensive study of the socio-economic characteristics of various age composition could result in challenges to conventional concepts. In connection with this, research on the duration of high-grade labor in various spheres (characteristics of professional serviceability connected to age and experience) and the health status and life expectancy of representatives of various trades are of great importance. It is necessary to take into account that scientific and technical progress creates the preconditions for strengthening «natural» elements in the existing distribution of labor and for the adaptation of labor conditions to the psychophysical features of various age and sex groups. This would enable the elderly and old people to work and would create a more flexible system for involving them in social production. Obviously, the possibility to change professions and the customization of retirement ages in various professions should be introduced. This is especially important today since the issue of guaranteeing adequate living standards

for pensioners has become and acute problem and the number of pensioners is steadily increasing. The labor potential of people of pension age is inefficiently used although though the number of seniors who are employed continues to increase.

According to the survey of economic activity carried out in 1997 by the State Statistics Committee of Ukraine according to ILO standards, among citizens aged 60-70 years 32.0% of men and 24.3% of women were employed. These indicators are especially high among the rural population (45.0% and 39.0% respectively). However, this does not mean that labor potential of this group is being used rationally. A significant part is spent on private land plots since it has become more difficult to find work outside the household in conditions of growing unemployment. The high rate of employment of the elderly is related to the meager-size of pensions they receive and consequently they agree to carry out any kind of work. Therefore, it is of particular importance to create the preconditions for the more effective participation of seniors in the process of production and in public life.

In summary, we can draw certain conclusions on how to achieve a favorable ratio of economic and demographic development. Obviously, attempts should not be made to regulate the birth rate; rather the economic and social activity of the elderly should be regulated. Increasing life expectancy should be accompanied by preservation of health and labor potential. We should not only aim to improve health of the elderly and old people, but also to promote the development of generations. Thus, the development of reasonable attitudes towards health and healthy lifestyles, and instilling the «will to health» in citizens (term of Ukrainian demographer and social hygienist Serhiy Tomilin) are urgent problems to be addressed.

Thus, comprehensive estimation of the aging process in Ukraine is necessary in order to lay the groundwork to effectively resolve the problems that emerge from it. When appropriate social and economic preconditions have formed, scientists and policy makers should be ready to implement measures to enable seniors to lead a longer, fuller life.

In December 1991 the UN General Assembly adopted The United Nations Principles of Older Persons. Governments were encouraged to incorporate these Principles into their national programs whenever possible. The UN has proclaimed 1999 the International Year of the Elderly. This should mobilize governments and the public sectors to work to resolve the problems of elderly people.

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# Some Aspects of the Demographic Situation in Ukraine: Reproductive Health and Family Planning

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